I. Claims

This listing of claims replaces without prejudice all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for forming a composite part in a die press having a first die including a first non-planar surface and a second die including a second non-planar surface, the die press being operable between an open position and a forming position, the first non-planar surface and the second non-planar surface being substantially complementary to define a substantially constant gap in the forming position, the process comprising the steps of:

disposing a composite stack in the open position, the stack comprising a pair of sheet metal skins, each of said skins having a thickness of at least about 0.005 in., and a paper layer which has been impregnated with resin disposed between and in contact with said skins of sheet metal;

causing the die press to transition from the open position to the closed position;

applying ~~said~~ a uniform pressure to said stack for sufficient time to bond together said skins and said paper layer while in the same operation forming a non-planar part from said stack;

moving a periphery of said stack in a direction toward a center thereof while maintaining a thickness of the stack that is substantially equal to the uniform gap; and

contacting substantially the entire surface of the stack with the die press.

2. (Original) The process for forming a composite part recited in claim 1, wherein said paper layer contains volatile solvents and water and further including the step of heating said paper layer prior to placing said paper layer between said metal skins in order to reduce the content of said volatile solvents and water in said paper layer.

3. (Original) The process for forming a composite part recited in claim 1, wherein said uniform pressure does not vary more than 10% at any two points along the surface of said stack.

4. (Previously Presented) The process for forming a composite part recited in claim 1, wherein said gap has a uniform width and wherein said uniform width does not vary more than about 2% at any two points along said gap.

5. (Original) The process for forming a composite part recited in claim 2, wherein the total combined quantity of volatile compounds and water in said paper layer is reduced to less than about 5% by weight of said paper layer.

6. (Original) The process for forming a composite part recited in claim 1, wherein said sheet metal is selected from the group consisting of cold rolled steel, galvanized steel, tin-coated steel and stainless steel.

7. (Original) The process for forming a composite part recited in claim 1, wherein said paper layer is adhesively bonded to said skins of sheet metal.

8. (Original) The process for forming a composite part recited in claim 1, wherein each of said skins has a thickness of from about 0.007 in. to about 0.030 in.

9. (Original) The process for forming a composite part recited in claim 1, wherein said paper layer has a thickness of at least about 0.01 in.

10. (Original) The process for forming a composite part recited in claim 1, wherein said paper layer has a thickness of from about 0.01 in. and 0.05 in.

11. (Original) The process for forming a composite part recited in claim 1, further including layers of adhesive disposed between said paper layer and each of said skins.

12. (Original) The process for forming a composite part recited in claim 1, wherein said sheet metal skins are zinc coated steel which has been cold rolled with zinc on the surface.

13. (Original) The process for forming a composite part recited in claim 1, wherein said metal skins are formed of low carbon micro-alloyed high-strength steel.

14. (Original) The process for forming a composite part recited in claim 2, wherein said sheet metal is selected from the group consisting of cold rolled steel, galvanized steel, tin-coated steel and stainless steel.

15. (Original) The process for forming a composite part recited in claim 2, wherein said paper layer is adhesively bonded to said skins of sheet metal.

16. (Original) The process for forming a composite part recited in claim 2, wherein each of said skins has a thickness of from about 0.005 in. to about 0.030 in.

17. (Original) The process for forming a composite part recited in claim 2, wherein said paper layer has a thickness of at least about 0.01 in.

18. (Original) The process for forming a composite part recited in claim 2, wherein said paper layer has a thickness of from about 0.01 in. and 0.05 in.

19. (Original) The process for forming a composite part recited in claim 2, further including layers of adhesive disposed between said paper layer and each of said skins.

20. (Original) The process for forming a composite part recited in claim 2, wherein said sheet metal skins are zinc coated steel which has been cold rolled with zinc on the surface.

21. (Original) The process for forming a composite part recited in claim 2, wherein said metal skins are formed of low carbon micro-alloyed high-strength steel.

22. (Original) The process for forming a composite part recited in claim 2, wherein said paper layer is multiple layers.